## PROGRESS

OF

# MEDICAL SCIENCE

#### MEDICINE

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The Retinitis of Arteriosclerosis, and its Relation to Renal Retinitis and to Cerebral Vascular Disease.—R. Foster Moore (Quart. Jour. Med., x, p. 29, 37-38) reports his studies upon the retinal findings in 44 patients admitted to St. Bartholomew's Hospital suffering from cerchral vascular disease, and 66 cases which came to the Moorfield's Eve Hospital complaining of visual disturbances. The patients from St. Bartholomew's have not been traced, as they were already the subjects of cerebral disease, but 59 of the 66 patients seen at the Moorfield's Eve Hospital have been followed carefully for the development of cerebral vasenlar lesions. His observations, carried out in minute detail, lead him to recognize three varieties of retinal disease, all of which may occur in the same patient, but which usually appear separately, and have very different prognostic values. These three types of retinal disease are: (1) Retinal arterioselerosis, in which the vessels of the retina appear tortnons, irregular in the size of their humina, with obstruction of the blood flow in the veins where they are crossed by arteries, and other signs not so important. Hemorrhages also occur frequently in the retina. (2) Arterioselerotic retinitis, in which the evidences of retinal arteriosclerosis are present usually in an advanced state, but in which are added explates into the retina, which appear as small white dots usually scanty in number and often affecting only one eye (45 per cent. of the 31 cases). This is really an advanced degree of retinal arteriosclerlsis. (3) Renal retinitis, in which the arterioselerotic changes are slight or absent, and large white patches of exudate, with edema and not infrequently detachment of the retina, are observed. This is the type seen most frequently in chronic parenchymatous nephritis. In the chronic interstitial types the patches of exudate are smaller, the star figure about the macula is more frequent and hemorrhages in the retina are more extensive, while the arterioselerotic changes in the retina are more marked. The author believes that in renal retinitis there is a toxic element added to the arterial eanse of the retinal disease. The large white patches or "cotton-wool spots" seen in this affection never appear in arterioselerotic retinitis. After a eareful analysis of the 110 eases the author concludes that in the group of eases, 35 in number, showing only retinal arterioselerosis, the mortality is lower, the incidence of gross cerebral vascular disease is less, and the blood-pressure is lower than in the eases. 31 in number, showing the changes characteristic of arteriosclerotic retinitis. the 44 eases admitted to the hospital suffering with gross cerebral vascular lesions 30 per cent, had no changes in the retine, 27 per cent. showed the changes of retinal arterioselerosis and 43 per cent. had the characteristic retinal picture of arteriosclerotic retinitis. Thus 70 per cent, of the cases showed changes in the retinal vessels. Following up the eases from the Moorfield's Eye Hospital 27 are known to have died and the cause of death was ascertained in 26, 12 or 46 per cent. of the deaths resulting from a gross vascular cerebral lesion. Forty-six patients from the 66 included in his cases have been followed, and 21 or 46 per cent, are known to have developed gross eerebral lesions. Eighteen of the remainder are still alive so that the above proportion will be added to as time passes. The patients with arterioselerotie retinitis live longer than the average patient showing renal retinitis, und, as can be seen, the percentage of deaths from cerebral vascular disease is much greater than that in renal retinitis, in which the average death is from "uremia" within about two years. Therefore the author feels that there is a form of retinitis which is associated with severe general arterioselerosis, is secondary to local retinal vascular disease, and may be only incidentally associated with disease of the kidney, its ophthalmoscopie character, its significance and its prognostie value being largely distinct from the corresponding features of renal retinitis. The cause of death is referable to disease of the vascular system and not of the kidney, and the patients usually live somewhat longer than those suffering from so-called renal retinitis.

Intestinal Protozoa in Salonica War Area.—Lieutenant W. Roche, in his report to the Medical Research Committee (Lancet, 1917, excii, 297) gives the results of 1425 examinations of the stools of 893 cases of diarrhea and dysentery occurring among the troops of the Salonica war area. These eases occurred during the months of August, September and October, 1916, and the author makes the observation that the incidence of diarrhea and dysentery is proportional to the number of flies, decreasing during cold weather and very hot, dry weather during which times the flies are also diminished greatly, and increasing again as the flies increase in warm, moist weather. In the 893 cases non-pathogenic amebæ were found in 81 cases, and amebæ which were not identified because of lack of time in 39 cases. Entameba histolytica was found in 37 cases; Emtameba minuta in 47 cases. Flagellate protozoa were found in 217 cases divided as follows: Lamblia intesti-

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nalis, 73; Tetramitus mesnili, 90; Triehomonas, 45; Cereomonas, 9. Coceidia were found in 18 cases. The author states that the bacillary dysenteries were predominant types, and observes that the comparatively few cases of neute amebic dysentery were interesting in view of the fact that many of the troops present in the Salonika area had been either in Egypt or Gallipoli and were Entaneba histolytica carriers. The ancebic cases were treated with 1 grain of emetin administered hypodermically, every day for twelve days. The coceidia usually disappeared from the stools in a few days, but the lamblia and tetramitus infections were the most difficult to get rid of. Calomel, bismuth, salol, turpentine, thymol, emetin and Dale's double emetin were given by month with no result, and rectal irrigations with quinin, turpentin and cusol were also without effect.

#### SURGERY

#### UNDER THE CHARGE OF

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The Practical Application of the Wassermann Test in the Diagnosis and Control of Treatment of Syphilis .- CRAIG (Am. Jour. Syph., Jannary, 1917, p. 192) says that the figures here given and the conclusions arrived at are based upon the results of 35,000 Wassermann tests personally performed and that the same technic has been employed in making all of these tests with the exception that, during the past two years, eholesterinized antigens have been used as well as antigens prepared from syphilitie fetal livers. As a result of his studies of these eases in the army the following deductions are made concerning the interpretations of the results of the Wassermann test: If the diseases, other than syphilis, that sometimes have given a positive result with the Wasserinnnn test, can be excluded, a double-plus (four-plus of some writers) reaction is diagnostic of syphilis. Under such conditions. Craig considers this type of reaction as absolutely specific, whether symptoms are present or not, or whether there is or is not a history of infection. Under the same conditions, a plus reaction (three-plus or two-plus of some writers) may, in primary, tertiary, and latent infections be regarded as diagnostie, provided there is a clear history of infection, or suspicious clinical symptoms are present. In the absence of either history or elinical symptoms a plus reaction should not be regarded as diagnostic of the disease. A diagnosis of syphilis should never be made upon a plus-minus reaction. Many perfectly normal individuals give this type of reaction and it is of no value in the diagnosis of the disease except that it should be considered as negative. A single negative reaction, where there is no history of infection and where symptoms are not present, is of considerable value as a corrob-